# Search

```
FILE 'CAPLUS, WPIX, USPATFULL, USPAT2' ENTERED AT 10:42:38 ON 17 NOV 2005
               E KIM HYUNG JOON/AU
             67 SEA ABB=ON PLU=ON "KIM HYUNG JOON"/AU
L1
L2
             0 SEA ABB=ON PLU=ON
                                   "KIM HYUNG JOON"/AU
L3
              8 SEA ABB=ON PLU=ON
                                   "KIM HYUNG JOON"/AU
             3 SEA ABB=ON PLU=ON "KIM HYUNG JOON"/AU
L4
     TOTAL FOR ALL FILES
             78 SEA ABB=ON PLU=ON "KIM HYUNG JOON"/AU
L5
               E ZHANG JINMING/AU
             59 SEA ABB=ON PLU=ON
                                   "ZHANG JINMING"/AU
L6
                                   "ZHANG JINMING"/AU
L7
             0 SEA ABB=ON PLU=ON
             2 SEA ABB=ON PLU=ON "ZHANG JINMING"/AU
L8
             0 SEA ABB=ON PLU=ON "ZHANG JINMING"/AU
L9
     TOTAL FOR ALL FILES
            61 SEA ABB=ON PLU=ON "ZHANG JINMING"/AU
L10
               E GANDOUR RICHARD D/AU
           182 SEA ABB=ON PLU=ON ("GANDOUR R D"/AU OR "GANDOUR RICHARD"/AU
L11
               OR "GANDOUR RICHARD D"/AU OR "GANDOUR RICHARD DAVID"/AU)
              5 SEA ABB=ON PLU=ON ("GANDOUR R D"/AU OR "GANDOUR RICHARD"/AU
L12
               OR "GANDOUR RICHARD D"/AU OR "GANDOUR RICHARD DAVID"/AU)
              5 SEA ABB=ON PLU=ON ("GANDOUR R D"/AU OR "GANDOUR RICHARD"/AU
L13
               OR "GANDOUR RICHARD D"/AU OR "GANDOUR RICHARD DAVID"/AU)
              0 SEA ABB=ON PLU=ON ("GANDOUR R D"/AU OR "GANDOUR RICHARD"/AU
L14
               OR "GANDOUR RICHARD D"/AU OR "GANDOUR RICHARD DAVID"/AU)
     TOTAL FOR ALL FILES
           192 SEA ABB=ON PLU=ON ("GANDOUR R D"/AU OR "GANDOUR RICHARD"/AU
L15
               OR "GANDOUR RICHARD D"/AU OR "GANDOUR RICHARD DAVID"/AU)
               E YOON ROE HOAN/AU
L16
             63 SEA ABB=ON PLU=ON
                                   "YOON ROE HOAN"/AU
                                   "YOON ROE HOAN"/AU
L17
             0 SEA ABB=ON PLU=ON
            23 SEA ABB=ON PLU=ON "YOON ROE HOAN"/AU
L18
L19
             1 SEA ABB=ON PLU=ON "YOON ROE HOAN"/AU
     TOTAL FOR ALL FILES
L20
            87 SEA ABB=ON PLU=ON "YOON ROE HOAN"/AU
L21
           362 SEA ABB=ON PLU=ON L1 OR L6 OR L11 OR L16
L22
             5 SEA ABB=ON PLU=ON L2 OR L7 OR L12 OR L17
L23
            32 SEA ABB=ON PLU=ON L3 OR L8 OR L13 OR L18
L24
             4 SEA ABB=ON PLU=ON L4 OR L9 OR L14 OR L19
    TOTAL FOR ALL FILES
L25
           403 SEA ABB=ON PLU=ON L5 OR L10 OR L15 OR L20
L26
           376 DUP REM L25 (27 DUPLICATES REMOVED)
L27
           362 SEA L26
L28
             7 SEA ABB=ON PLU=ON L27 AND ?THIOL?
L29
             0 SEA L26
L30
             O SEA ABB=ON PLU=ON L29 AND ?THIOL?
L31
            14 SEA L26
L32
             7 SEA ABB=ON PLU=ON L31 AND ?THIOL?
L33
             0 SEA L26
L34
             O SEA ABB=ON PLU=ON L33 AND ?THIOL?
    TOTAL FOR ALL FILES
L35
            14 SEA ABB=ON PLU=ON L26 AND ?THIOL?
L36
            14 DUP REM L35 (0 DUPLICATES REMOVED)
               D 1-14 BIB AB
```

```
FILE 'REGISTRY' ENTERED AT 12:10:15 ON 17 NOV 2005
Ll
              1 SEA ABB=ON PLU=ON 2885-00-9
     FILE 'USPATFULL, USPAT2' ENTERED AT 12:11:25 ON 17 NOV 2005
           1325 SEA ABB=ON PLU=ON 427/388100/NCL OR 427/388400/NCL OR
L2
                427/388500/NCL
             72 SEA ABB=ON PLU=ON 427/388100/NCL OR 427/388400/NCL OR
L3
                427/388500/NCL
     TOTAL FOR ALL FILES
           1397 SEA ABB=ON PLU=ON 427/388100/NCL OR 427/388400/NCL OR
L4
                427/388500/NCL
1.5
              O SEA ABB=ON PLU=ON L2 AND L1
              O SEA ABB=ON PLU=ON L3 AND L1
L6
     TOTAL FOR ALL FILES
1.7
              O SEA ABB=ON PLU=ON L4 AND L1
L8
          12136 SEA ABB=ON PLU=ON L2 AND ALKANETHIOL OR ((ALKANE? OR ALKYL?)
                (5A) (THIOL? OR MERCAPTAN?))
L9
           1147 SEA ABB=ON PLU=ON L3 AND ALKANETHIOL OR ((ALKANE? OR ALKYL?)
                (5A) (THIOL? OR MERCAPTAN?))
     TOTAL FOR ALL FILES
L10
          13283 SEA ABB=ON PLU=ON L4 AND ALKANETHIOL OR ((ALKANE? OR ALKYL?)
                (5A) (THIOL? OR MERCAPTAN?))
L11
             19 SEA ABB=ON PLU=ON L2 AND (ALKANETHIOL OR ((ALKANE? OR
                ALKYL?) (5A) (THIOL? OR MERCAPTAN?)))
L12
              3 SEA ABB=ON PLU=ON L3 AND (ALKANETHIOL OR ((ALKANE? OR
                ALKYL?) (5A) (THIOL? OR MERCAPTAN?)))
     TOTAL FOR ALL FILES
L13
             22 SEA ABB=ON PLU=ON L4 AND (ALKANETHIOL OR ((ALKANE? OR
                ALKYL?) (5A) (THIOL? OR MERCAPTAN?)))
            130 SEA ABB=ON PLU=ON L2 AND ((STEEL? OR IRON?) (5A) ?GALV?)
L14
L15
             12 SEA ABB=ON PLU=ON L3 AND ((STEEL? OR IRON?) (5A) ?GALV?)
     TOTAL FOR ALL FILES
L16
            142 SEA ABB=ON PLU=ON L4 AND ((STEEL? OR IRON?) (5A) ?GALV?)
L17
              2 SEA ABB=ON PLU=ON L11 AND L14
L18
              O SEA ABB=ON PLU=ON L12 AND L15
     TOTAL FOR ALL FILES
L19
              2 SEA ABB=ON PLU=ON L13 AND L16
                D 1-2 BIB AB
L20
             29 SEA ABB=ON PLU=ON L2 AND ((STEEL? OR IRON?) (5A) (ELECTROGALV
                ? OR ELECTRO-GALV?))
L21
              5 SEA ABB=ON PLU=ON L3 AND ((STEEL? OR IRON?) (5A) (ELECTROGALV
                ? OR ELECTRO-GALV?))
     TOTAL FOR ALL FILES
L22
             34 SEA ABB=ON PLU=ON L4 AND ((STEEL? OR IRON?) (5A) (ELECTROGALV
                ? OR ELECTRO-GALV?))
L23
            153 SEA ABB=ON PLU=ON L2 AND ((STEEL? OR IRON?) (5A) ?PHOSPH?)
L24
              9 SEA ABB=ON PLU=ON L3 AND ((STEEL? OR IRON?) (5A) ?PHOSPH?)
     TOTAL FOR ALL FILES
L25
            162 SEA ABB=ON PLU=ON L4 AND ((STEEL? OR IRON?) (5A) ?PHOSPH?)
L26
             45 SEA ABB=ON
                           PLU=ON L14 AND L23
L27
              4 SEA ABB=ON
                           PLU=ON L15 AND L24
     TOTAL FOR ALL FILES
L28
             49 SEA ABB=ON PLU=ON L16 AND L25
L29
              1 SEA ABB=ON PLU=ON L11 AND L26
L30
              O SEA ABB=ON PLU=ON L12 AND L27
     TOTAL FOR ALL FILES
L31
              1 SEA ABB=ON PLU=ON L13 AND L28
               D BIB AB
L32
           2485 SEA ABB=ON PLU=ON 427/359000/NCL OR 427/421000/NCL OR
                427/430100/NCL OR 427/435000/NCL OR 427/420000/NCL
L33
            420 SEA ABB=ON PLU=ON 427/359000/NCL OR 427/421000/NCL OR
                427/430100/NCL OR 427/435000/NCL OR 427/420000/NCL
```

```
TOTAL FOR ALL FILES
           2905 SEA ABB=ON PLU=ON 427/359000/NCL OR 427/421000/NCL OR
L34
                427/430100/NCL OR 427/435000/NCL OR 427/420000/NCL
              3 SEA ABB=ON PLU=ON L32 AND L1
L35
              0 SEA ABB=ON PLU=ON L33 AND L1
L36
     TOTAL FOR ALL FILES
              3 SEA ABB=ON PLU=ON L34 AND L1
L37
               D 1-3 BIB AB
             13 SEA ABB=ON PLU=ON L32 AND (ALKANETHIOL OR ((ALKANE? OR
L38
               ALKYL?) (5A) (THIOL? OR MERCAPTAN?)))
L39
              2 SEA ABB=ON PLU=ON L33 AND (ALKANETHIOL OR ((ALKANE? OR
                ALKYL?) (5A) (THIOL? OR MERCAPTAN?)))
     TOTAL FOR ALL FILES
             15 SEA ABB=ON PLU=ON L34 AND (ALKANETHIOL OR ((ALKANE? OR
L40
               ALKYL?) (5A) (THIOL? OR MERCAPTAN?)))
L41
              1 SEA ABB=ON PLU=ON L38 AND ((STEEL? OR IRON?) (5A) ?PHOSPH?)
L42
              O SEA ABB=ON PLU=ON L39 AND ((STEEL? OR IRON?) (5A) ?PHOSPH?)
     TOTAL FOR ALL FILES
L43
              1 SEA ABB=ON PLU=ON L40 AND ((STEEL? OR IRON?) (5A) ?PHOSPH?)
               D BIB AB
              1 SEA ABB=ON PLU=ON L38 AND ((STEEL? OR IRON?) (5A) (ELECTROGAL
L44
               V? OR ELECTRO-GALV?))
L45
              O SEA ABB=ON PLU=ON L39 AND ((STEEL? OR IRON?) (5A) (ELECTROGAL
               V? OR ELECTRO-GALV?))
     TOTAL FOR ALL FILES
L46
              1 SEA ABB=ON PLU=ON L40 AND ((STEEL? OR IRON?) (5A) (ELECTROGAL
               V? OR ELECTRO-GALV?))
               D BIB AB
L47
              1 SEA ABB=ON
                          PLU=ON L38 AND ((STEEL? OR IRON?) (5A) ?GALV?)
L48
              O SEA ABB=ON PLU=ON
                                   L39 AND ((STEEL? OR IRON?) (5A) ?GALV?)
     TOTAL FOR ALL FILES
L49
              1 SEA ABB=ON PLU=ON L40 AND ((STEEL? OR IRON?) (5A) ?GALV?)
```

=>

## US' ENTERED AT 12:36:43 ON 17 NOV 2005

L1	FILE		STRY' ENTERED AT 12:36:54 ON 17 NOV 2005 SEA ABB=ON PLU=ON 2885-00-9
	FILE	'CAPL	US' ENTERED AT 12:37:06 ON 17 NOV 2005
L2		1503	SEA ABB=ON PLU=ON L1
L3		33	SEA ABB=ON PLU=ON L2 AND STEEL?
L4		11	SEA ABB=ON PLU=ON L2 AND (STEEL? (5A) ?GALV?)
L5		11	FOCUS L4 1-
			D 1-11 ALL RN
L6		0	SEA ABB=ON PLU=ON L2 AND (STEEL? (5A) (?ELECTROGALV? OR
			ELECTRO-GALV?))
L7		10	SEA ABB=ON PLU=ON L3 AND (SOLVENT? OR ALCOHOL OR ETHANOL OR
			THF OR ACETONE OR TOLUENE OR HEXANE OR FURAN OR ETHER? OR
			WATER OR H2O)
L8		8	SEA ABB=ON PLU=ON L7 NOT L4
L9		8	FOCUS L8 1-
			דות דוג ס נ

```
=> => file reg
FILE 'REGISTRY'
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 American Chemical Society (ACS)
```

=> d his

```
FILE 'LREGISTRY'
  L1
                   STR
       FILE 'REGISTRY'
  L2
                5 S L1
  L3
                  SCR 1771
  L4
               50 S L1 AND L3
  L5
                  SCR 2043
  L6
               40 S L1 AND L3 NOT L5
  L7
                  SCR 1838
  rs
               50 S L1 AND L3 NOT (L5 OR L7)
       FILE 'LREGISTRY'
 L9
                  STR L1
      FILE 'REGISTRY'
 L10
              50 S L9 AND L3 NOT (L5 OR L7)
 L11
            1033 S L9 AND L3 NOT (L5 OR L7) FUL
                 SAV L11 CAM379/A
                 E MXS/CI
 L12
          75547 S E3
 L13
            1018 S L11 NOT L12
 L14
             158 S L13 AND SI/ELS
 L15
             860 S L13 NOT L14
L16
           87160 S STEEL#
     FILE 'HCA'
L17
         730089 S L16 OR STEEL? OR STAINLESS?
L18
           3764 S L14
L19
            287 S L17 AND L18
L20
          37338 S GALVANI?
L21
             49 S L19 AND L20
L22 ,
          33785 S L15
L23
            409 S L22 AND L17
     FILE 'LREGISTRY'
L24
                STR L9
```

```
FILE 'REGISTRY'
L25
           11 S L24 SSS SAM SUB=L11
            240 S L24 SSS FUL SUB=L11
L26
               SAV L26 CAM379A/A
L27
           224 S L26 AND L15
     FILE 'HCA'
L28
          7693 S L27
L29
          124 S L28 AND L17
     FILE 'LCA'
          7647 S (FILM? OR THINFILM? OR LAYER? OR OVERLAY? OR OVERLAID?
L30
          6999 S FILM? OR THINFILM? OR LAYER? OR OVERLAY? OR OVERLAID? O
L31
     FILE 'HCA'
L32
         97127 S STEEL? (2A) (L31 OR GALVANI?)
               E COATINGS/CV
         43471 S E2 OR E3
L33
               E COATING MATERIALS/CV
L34
        263567 S E3
               E COATING PROCESS/CV
L35
        120624 S E3
            30 S L29 AND L32
L36
L37
            30 S L29 AND (L33 OR L34 OR L35)
            46 S L36 OR L37
L38
         42016 S (ALUMINUM# OR AL OR ZINC# OR ZN OR COPPER# OR CU) (2A) (S
L39
L40
           778 S L22 AND L39
            28 S L40 AND (L33 OR L34 OR L35)
L41
     FILE 'REGISTRY'
              E 1-OCTADECANETHIOL/CN
L42
             1 S E3
             E 16-MERCAPTOHEXADECANOIC ACID/CN
L43
             1 S E3
     FILE 'HCA'
L44
          1457 S L42
           376 S L43
L45
L46
            37 S L44 AND L17
            17 S L46 AND L32
L47
            12 S L46 AND (L33 OR L34 OR L35)
L48
L49
           203 S L44 AND L39
L50
            10 S L49 AND (L33 OR L34 OR L35)
L51
            1 S L45 AND L17
L52
            90 S L45 AND L39
L53 ·
            4 S L52 AND (L33 OR L34 OR L35)
L54
         · 68 S L52 AND L31
```

```
L55
             21 S L47 OR L48
L56
             19 S L55 NOT L50
L57
              5 S L51 OR L53
L58
             63 S L54 NOT L57
```

# FILE 'REGISTRY'

```
=> d 126 que stat
 Ľ3
                   SCR 1.771
 L5
                   SCR 2043
L7
                   SCR 1838
L9
                   STR
                           21
                                                                      22
                           0
                                                                      G3
^{1} S\sim G1- G2
                                                 013
                       N = Ak
                                   010 Si E3
                                                                  017
                                                    Si-G3
 E1
      2
          3
                                                                      Si-G3
                      @6
                                                    E2 14
                                                                   E1
                                                                          18
Page 1-A
    33
                                                    47
    G3
                                                    0||
@23 Si-G3
                     Ak @37
                                   0~ Ak
        24
                                                                      NH~Ak
                                 @40 41
                                                 @44
                                                        45
                                                                     @49 50
   G3
   34
```

Page 1-C REP G1=(1-20) CH2 VAR G2=ME/COOH/OH/CHO/6/44/10/13/17/23 VAR G3=40/37/OH VAR G4=NH2/49/53 NODE ATTRIBUTES: HCOUNT IS E1 AT 1 **HCOUNT** IS E3 ΑT 10 HCOUNT IS E2 AT 13 HCOUNT IS E1 AT

17

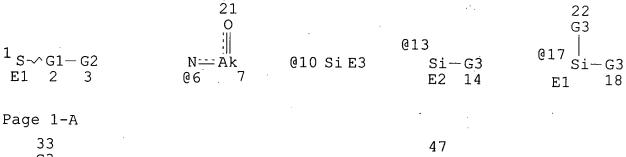
```
CONNECT IS E1
               RC AT
                        1 .
CONNECT IS E2
               RC AT
                        7
CONNECT IS E1
               RC AT
                       37
CONNECT IS E1
               RC AT
                       41
CONNECT IS E1
               RC AT
                       50
CONNECT IS E1
               RC AT
                       54
CONNECT IS E1 RC AT
                       57
DEFAULT MLEVEL IS ATOM
GGCAT
        IS SAT
                AT
                      7
GGCAT
        IS SAT
                AΤ
                     37
GGCAT IS SAT
                AT
                     41
GGCAT
        IS SAT
                AΤ
                     50
GGCAT
        IS SAT
                 ΑT
                     54
GĜCAT
        IS SAT
                     57
                AT
DEFAULT ECLEVEL IS LIMITED
```

#### GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 27

### STEREO ATTRIBUTES: NONE

L11 1033 SEA FILE=REGISTRY SSS FUL L9 AND L3 NOT (L5 OR L7)
L24 STR



```
Page 1-C
REP G1=(7-20) CH2
VAR G2=ME/COOH/OH/CHO/6/44/10/13/17/23
VAR G3=40/37/OH
VAR G4=NH2/49/53
NODE ATTRIBUTES:
HCOUNT
        IS E1
                   AT
HCOUNT
         IS E3
                   AT
                       10
HCOUNT
         IS E2
                  AT
                       13
HCOUNT IS E1
                  AT
                       17
CONNECT IS E1
               RC AT
CONNECT IS E2
               RC AT
                        7
CONNECT IS E1
               RC AT
                       37
CONNECT IS E1
               RC AT
                       41
CONNECT IS E1
               RC AT
                       50
CONNECT IS E1
               RC AT
                       54
CONNECT IS E1
               RC AT
                       57
DEFAULT MLEVEL IS ATOM
GGCAT
        IS SAT
                AT
                      7
GGCAT
        IS SAT
                ΑT
                     37
GGCAT
        IS SAT
                AT
                     41
GGCAT
        IS SAT
                AΤ
                     50
GGCAT
        IS SAT
                ΑT
                    54
GGCAT
        IS SAT
                AT
                    57
DEFAULT ECLEVEL IS LIMITED
```

## GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 27

STEREO ATTRIBUTES: NONE

L26 240 SEA FILE=REGISTRY SUB=L11 SSS FUL L24

100.0% PROCESSED 320 ITERATIONS

240 ANSWERS

SEARCH TIME: 00.00.01

=> file hca FILE 'HCA' USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

=> d 150 1-10 cbib abs hitstr hitind

```
FILE 'CAPLUS' ENTERED AT 15:25:20 ON 17 NOV 2005
           20892 SEA ABB=ON PLU=ON (STEEL? (10A) ?GALV?)
21588 SEA ABB=ON PLU=ON (STEEL? (10A) ?PHOSPH?)
2209 SEA ABB=ON PLU=ON L1 AND L2
0 SEA ABB=ON PLU=ON L3 AND (ALKANETHIOL? OR ((?ALKANE? OR
L1
L2
L3
L4
                  ?ALKYL?) (5A) (?THIOL? OR ?MERCAPTAN?)))
L5
              13 SEA ABB=ON PLU=ON L3 AND FINGERPRINT?
L6
              13 FOCUS L5 1-
                 D 1-13 ALL RN
              25 SEA ABB=ON PLU=ON L3 AND (?THIOL? OR ?MERCAPTAN?)
25 SEA ABB=ON PLU=ON L7 NOT L5
Ь7
L8
Ь9
              25 FOCUS L8 1-
                  D 1-25 ALL RN
     FILE 'REGISTRY' ENTERED AT 15:41:27 ON 17 NOV 2005
L10
               1 SEA ABB=ON PLU=ON 2885-00-9
                 D
L11
               1 SEA ABB=ON PLU=ON 2917-26-2
L12
                1 SEA ABB=ON PLU=ON 7773-83-3
     FILE 'CAPLUS' ENTERED AT 15:42:15 ON 17 NOV 2005
L13
            2490 SEA ABB=ON PLU=ON L10 OR L11 OR L12
L14
               2 SEA ABB=ON PLU=ON L3 AND L13
                 D 1-2 ALL
     FILE 'USPATFULL, USPAT2' ENTERED AT 15:45:05 ON 17 NOV 2005
L15
             247 SEA ABB=ON PLU=ON L10 OR L11 OR L12
L16
              20 SEA ABB=ON PLU=ON L10 OR L11 OR L12
     TOTAL FOR ALL FILES
             267 SEA ABB=ON PLU=ON L13
L17
L18
               2 SEA ABB=ON PLU=ON L3 AND L13
L19
               O SEA ABB=ON PLU=ON L3 AND L13
     TOTAL FOR ALL FILES
L20
               2 SEA ABB=ON PLU=ON L14
                 D 1-2 BIB AB
                 D 1-2 BIB AB IND RN
```

=>

. . .